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Stakeholder Information Flow from Horse Entrepreneurs to Customers: Preliminary Study of Prevention of Equine Infectious Diseases

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EXECUTIVE SUMMARY

This study focuses on emphasizing the instrumental role of stakeholder analysis and the concept of business ecosystem. Specifically, a stakeholder relationship might provide the channel for the particular instrumental targets of a business subset. This kind of stakeholder management is based on a principal-agent relationship between industry actors. However, this example, which focuses on horse entrepreneurs and the infectious diseases of this subset of the equine industry, shows that instead of a simple principal-agent relationship, stakeholder management might yield a chain of principal-agent relationships in the form of a principal-agent/principal-agent relationship (for example, one or more of the stakeholders simultaneously takes on the role of both agent and principal). According to the analysis, horse entrepreneurs have this kind of double role in stakeholder management for the prevention of infectious diseases.

Keywords: Business Ecosystem, Disease Outbreak, Double Role, Finnish Trotting and Breeding Association, Horse-Related Enterprise, Instrumental Stakeholder Analysis, Principal-Agent Relationship, Sustainable Control

INTRODUCTION: WHY IT IS ESSENTIAL

Equine-related industries are among the fastest growing and the most promising in both the European Union and the Finnish rural context (Rantamäki-Lahtinen & Vihinen, 2004; Häggblom et al., 2012; Leppälä et al., 2015). Members of the European industry can be a professional business, a leisure activity, or an amalgam of both (Henley Centre, 2004; Rantamäki-Lahtinen & Vihinen, 2004; Sigurdardottir & Steinthorsson, 2011; Andersson Cederholm, 2012). In Finland, equine industry has a significant effect on employment, with its 15,000 employees (the Finnish Trotting and Breeding Association, 2017) and 3,000 full- or part-time horse-related enterprises (Pussinen & Thuneberg, 2014). Sometimes a horse business can be a hobby that may grow into a bigger business (Rantamäki-Lahtinen & Vihinen, 2004; Sigurdardottir & Steinthorsson, 2011).

Disease outbreaks are destructive to Finnish equine industry. Critical factor can be resources and how they are divided together with stakeholders (Moore, 1998). It is in the best interests of the horse entrepreneur that one of his or her stakeholder group, customers, follow their instructions, which can reduce the probability of spreading contagious diseases beforehand. Above all, customers' cooperation serves the horse entrepreneurs' financial profit, because obeying the rules can forestall expensive disease

eradication measures. In contrast to Moore (1998, 167) resources are not brought to create new value for customers. Compliance and obedience can increase the economic value and success of the horse entrepreneurs' business, which is a value-added business where customers can cooperate. However, also customers can benefit. Based on Finnish legislation horse entrepreneurs have a great responsibility to ensure that their customers are informed about and prepared for the prevention of transmissible diseases and by a good horse health customers' pleasant sporting experiences are promoted.

BACKGROUND: WHAT WE ALREADY KNOW AND WHAT IS MISSING?

It is found that horse entrepreneurs have often rejected a traditional market ethos (Sigurdardottir & Steinthorsson, 2011). Instead, they can create values beyond the economic under the concept of animal disease (values of animal health and well-being) and cooperate with customers through co-creative processes in which these sustainable values are maintained and respected. In this framework horse entrepreneurs can focus their attention to horse health and the biosecurity of their stables. Biosecurity covers risk assessment and concrete preventive operations, such as vaccination, disinfection, and the quarantine of horses that are sick or from other stables. Previous studies from the US and New Zealand have revealed that these practices are implemented in varying degrees (USDA, 2006; Rosanowski et al., 2012; Rosanowski et al., 2013) but in Finland the horse industry's biosecurity practices have rarely been studied. Recently it is revealed that the majority of horse owners (85–95%) vaccinate their horses at least for equine influenza (Koskinen, 2014a) and that those horses active in equine sport arenas are mostly vaccinated (Koskinen, 2014a, 2014b). Worm control practices were statistically combined with occurrence of helminths and were not explicitly reported (Aromaa, et al., 2018).

Entrepreneurs are often very engaged with their horses and so externalize many business functions by contracts with hay farmers, smiths, veterinarians, manure transporters, etc. Thus, horse entrepreneurs are involved in an inspiring project with many external and internal stakeholders. Some studies show how stakeholders such as rural veterinarians and farmers (Hamilton, 2018) or different infection control authorities (Van Woezik et al., 2016) have co-productive potential in their collaborative relationships. Nevertheless, these studies have not approached a unique and co-creative relationship between a private horse entrepreneur and a customer in which the horse entrepreneur is led by other (usually public) stakeholders, but in everyday business situations, the horse entrepreneur leads a stakeholder group (customers).

Several theories about stakeholders and their relationship with organizations have been published. It may be questionable whether all the stakeholder research refers to the same underlying stakeholder theory (Egels-Zandén & Sandberg, 2009). In literature, the concept of "stakeholder" is contested being variously describable, internally complex and open in character (Miles, 2017). Empirical formulations of stakeholder theory describe how entrepreneurs behave and how people actually address their stakeholder relationships. Instrumental theory shows what would happen if entrepreneurs adhered to stakeholder management principles, and normative theory stresses a moral (what one should do with stakeholders) dimension of behavior (Jones, 1995, 406).

The purpose of stakeholder management was to create methods to strategically manage the different groups and relationships that resulted (Fontaine et al., 2006, 13). A framework for effective stakeholder management has been proposed and empirically validated (Yang et al., 2011). The framework includes the identification of critical success factors, a process of stakeholder management, and the promotion of relationships. It sees the importance of identifying and analyzing stakeholders and their behavior and needs and concludes that communication with stakeholders, clear goal setting, and a context-sensitive flexible process model improve stakeholder management. Taking social responsibilities seriously (such as economic, legal, and ethical issues) is a precondition for management of these relationships and one theoretical study with the integration of sustainability and project stakeholder management by practical tools and frameworks (Silvius & Schipper, 2019) and one empirical study about Corporate Social Responsibility communication of a firm (Carrasco et al., 2019) have recently been published.

In recent literature (Carrasco et al., 2019; Silvius & Schipper, 2019; Zarewa, 2019), however, management frameworks have been connected with old formula of identifying and assessing stakeholders and these studies have concentrated on traditional industries such as product systems (Zarewa, 2019) and banking industry (Carrasco et al., 2019) not suitable for comparison with special values and rural environment met by horse entrepreneurs. In professional business industry without taking care of live humans and animals the economic and ethical influences of disease outbreak are often neglected. Thus, the value of several close stakeholders and the interdisciplinary approach about horse entrepreneurs and their surrounding environment with its threats and potentials has previously been missed.

MAIN FOCUS OF THE CHAPTER: PURPOSE OF THE STUDY AND HOW AUTHORS FILL THE GAP?

Sustainable, ethical control of health and well-being of horses can be achieved with or without stakeholders. Usually, it is based on adequate knowledge of horse entrepreneurs and communication with their relevant partners. Main task of this study is to evaluate how knowledge flows from a horse entrepreneur to one important stakeholder group, customers. Because horse entrepreneurs have an expected goal to achieve and maintain a good horse health, the biosecurity of the stables is the context of this study. In a collaborative context it is clear that stakeholders are critical to the success or failure of a biosecurity project. Stakeholder analysis of Finland identifies these stakeholders and categorizes them as public (regulators, veterinary and environmental authorities at the municipality and other administrative levels) and private (veterinarians, horse associations, other horse entrepreneurs, customers, and service providers, such as smiths, horse welfare therapists, feed producers, horse transport services, and manure recipients) (Figure 2). In a case of disease outbreak, these communities of customers, governmental and nongovernmental institutions come together in an intentional manner. Authorities can transmit biosecurity-associated regulations to entrepreneurs whereas private veterinarians and the Finnish Trotting and Breeding Association (Suomen Hippos) can offer instructions, general knowledge, and other information in such a way that horse entrepreneurs could be expected to have some information on how to protect their horses.

The stakeholder theory or management literature offers the concept of “instrumental stakeholder theory” (Jones 1995; Jones, Harrison, & Felps, 2018), which can integrate business and society and which is the synthesis of ethics and economics. It is close to Yang et al.’s idea of analyzing stakeholders and their needs. This study generally parallels the discussions in the instrumental stakeholder theory, although the main focus is the intentional instrumental and transmission processes of the stakeholder framework in the prevention of transmissible diseases in the equine industry. The theoretical perspectives for this kind of goal-oriented (intentional) transmission process are rare in discussions of stakeholder management. By contrast, these discussions are familiar in the branch of “normative stakeholder management” (Benson & Davidson, 2010), although this is a relatively limited theme. Typically, goal-oriented (normative) stakeholder management is linked with the perspectives of the principal-agent model (see, e.g., Benson & Davidson, 2010) and with managerial Corporate Social Responsibility (CSR) research. The latter denies a paradoxical tension between the ethical case and the business case for CSR; in other words, what is good for society is also good for the company. According to Hoffman (2018, 675), the paradigm of managerial CSR research “lines up with traditional stakeholder theory, which assumes that a broad, inclusive and responsive stakeholder management also makes a company more successful in financial terms.”

This study focuses on the instrumental role of stakeholder management. Stakeholders are defined as those people and organizations that are involved with or have interests in the entrepreneur’s biosecurity project. Authors of this chapter understand the term “instrumental” according to the definition from the Cambridge Dictionary (2018):

“If someone or something is instrumental in a process, plan, or system, that person or thing is one of the most important influences in causing it to happen”. The equine industry provides an interesting platform to study different forms of relationships and their management. In the special relationship between a horse entrepreneur and a customer, a principal (entrepreneur) and an agent (customer) role is constructed. On

the other hand, the variability of the members of the equine industry challenges the robustness of instrumental or normative stakeholder management. For these reasons, this study, which focuses on the modes of the principal-agent relationships in the field of stakeholder management, uses the equine industry as a preliminary study. The principal-agent relationship resembles the rational type of micro-politics that, through agency theory, ascribes different but alignable interests to principals and agents in the agency relationship, such as viewing headquarter-subsidiary relationships as principal-agent relationships (cf. Pedraza-Acosta & Mouritsen, 2018). In particular, this study emphasizes the instrumental and interorganizational role of stakeholder management due to the chosen focal point of disease prevention in the equine industry. The study's novel contribution relies on the specific characteristics of the equine industry, which might reveal new findings associated with the normative/instrumental stakeholder management (the combination of the principal-agent model and stakeholder management). The specific perspectives of the equine industry, which is a hobby with high engagement from entrepreneurs and customers, especially challenge the typical business perspectives of stakeholder management.

According to Donaldson (1999), academics dealing with instrumental stakeholder theory are usually theorists who question a profit-only definition of the corporation's purpose. Stakeholder management based on instrumental stakeholder theory can be considered as the source of a sustainable competitive advantage (Jones et al., 2018). The current study emphasizes the instrumental role of stakeholder management, but without the focus on competitive advantage or sustainable competitive advantage (cf. Jones, 1995; Jones et al., 2018). In this study, ethics and trust are also important components of the stakeholder management perspective in the branch of the horse economy due to the many noneconomic motives of horse entrepreneurs.

Firstly, the current study adopts Jones' instrumental approach of stakeholder theory in an empirical study design. Secondly, this approach is completed by Moore's business ecosystem lens by seeing business ecosystems analogously with biological perspective (biological ecosystems) and by engaging the customers and considering their behavior as a co-creative part of the entrepreneur's business in order to prevent animal diseases. Stakeholder theories are criticized due to their technique and instrumental nature (Key, 1999) typical for mechanistic visions of organizations and thus, thirdly, more organic approach to organizational life is introduced. Interorganizational, complex networks between individuals and firms, key elements of business ecosystems (Peltoniemi & Vuori, 2004; Mäkinen & Dedehayir 2012; Basole et al., 2015), are recognized and much attention is devoted to understanding the immediate task of business environment, defined by the organization's direct interactions with customers, competitors, suppliers, and governmental agencies and matching of these subsystems like in living organism (Morgan, 2006, 39).

MATERIALS AND ANALYSIS

This article relies on the power of social media as an effective source of knowledge. It was a data source containing relevant stakeholder activity information often publicly available (Basole et al., 2015). Through multiple searches of the hevostalli.net/tallit portal it was determined that Finnish horse entrepreneurs have their own websites. Some of these are free for all (including permanent customers and guests), but in other instances, permanent customers have been invited to closed Facebook groups. Anyone can search horse-related enterprises at the hevostalli.net portal by region, by an enterprise's name, or in alphabetical order. Further, the Finnish Equestrian Association has a horse-related service search engine at its own website, and the Finnish Horse Trekking Association has lists of its member enterprises categorized by region and offers a more accurate contact search that relies on the linking capacity of Google Maps. Some special horse breeds, such as the Icelandic horse, have associations of their own (Finnish Icelandic Horse Association), and stables populated by Icelandic horses can regionally be found through these associations' websites.

The aim of material collection was to gain evidence from horse entrepreneurs' websites about their animal disease communication activities. The inclusion criteria were the availability of a website and its

information. Thus, closed Facebook groups were excluded, and the open hevostalli.net portal, the Finnish Horse Trekking Association's lists, and the Finnish Icelandic Horse Association's lists were included. This yielded 1,251 websites, which decreased to 726 when inactive and incorrect websites were removed (see Figure 1). All active websites were thoroughly reviewed, and enterprises were divided into two categories: those that offered disease prevention communication and those that did not. For those in the yes category, a more detailed website analysis was executed.

*** FIGURE 1 ABOUT HERE***

Figure 1. Materials of the study and the number of websites after the removal process

For detailed website analysis strategy, a comparison with a biosecurity planning checklist was utilized. A checklist for livestock farm events designed by Kerr (2017) at Washington State University was introduced, with certain modifications for the needs of the equine industry and native conditions in Finland. The original checklist discusses the potential risks that visitors could pose to farms and reviews the factors that increase the risk of spreading disease. In the modified final checklist, six checkpoints were included: 1) the creation of a biosecurity plan with professionals who know the local disease status and best disinfectant solutions, 2) a definition of the proper use of disinfectants, 3) reminders for good hand hygiene, 4) a decision about clean shoes and clothing, 5) a determination of the best location of the parking facilities, and 6) a decision about restrictions, such as banning dogs and forbidding entrance for 48 hours after a return from an international journey.

Further, animal disease communication activities of entrepreneurs were extended to the context of communication in a direct customer relationship. The first author was in personal contact with entrepreneurs who fell in previous yes category by being a potential customer and by sending a Facebook or e-mail message. This data collection method closely resembled the Mystery shopping method, in which the service quality and the satisfaction of an anonymous, "mysterious" customer is evaluated (Wilson, 1998). In this study researchers favored a structured approach with a predefined fictional profile of horse entrepreneur's customer, who is interested in many equestrian activities in several stables in homeland and has regular horse travelling activities in countries which suffer epidemics of infectious equine diseases. For building this risky customer profile, recent (year 2018) epidemic situation among horse populations in different countries was first reviewed at World Organization for Animal Health web site (www.oie.int) and our fictional customer's journeys were focused to these destinations.

RESULTS

Empirical and literature analysis and our experiences with this branch of the equine industry yielded the following stakeholder framework for horse entrepreneurs.

*** FIGURE 2 ABOUT HERE***

Figure 2. Horse entrepreneurs and their stakeholders (Hippos = the Finnish Trotting and Breeding Association, EVIRA = the Finnish Food Safety Authority, a central authority, AVI = Regional State Administrative Agency)

In website analysis a low level of contagious disease communication activity by horse entrepreneurs was observed. Only 22 horse entrepreneurs (3%) gave preventive hygiene instructions to their customers, and one entrepreneur used its front page to remind of the importance of disinfection and changing clothes for each stable because of a recent (but successfully controlled) strangles outbreak. Horse entrepreneurs'

activity in these 22 cases can be divided by enterprises' business priorities. Preventive disease communication was most commonly found in Icelandic horse enterprises (59%), followed by medium-size riding schools (32%), whereas only 4.5% of entrepreneurs were active in mixed stables (stables populated by Icelandic horses and other horses; 4.5%) and stables concentrated on the management of customers' leisure horses (4.5%).

The disease communication activity of horse entrepreneurs was observed by combining Icelandic horse stables ($n = 13$; see Figure 1) and 45 horse trekking enterprises (often populated by Icelandic horses). Activity was found in 17% of these 58 enterprises, and it was quite equally distributed over the Southern ($n = 3$), Northern ($n = 3$), and Eastern ($n = 4$) parts of Finland. Horse entrepreneurs' communication was concentrated on the hygiene of customers' equipment if these customers had participated in horse-related activities in other stables. In these rural enterprises, customers' cars were asked to leave the parking areas (17%) and dogs were not welcomed (10%), but both requirements were due to general consumer safety and entrepreneurs' home privacy rather than the risk of contagious disease.

All of those entrepreneurs who took biosecurity seriously asked their customers to wash their clothes or use different clothes in different stables. Most often, disinfection was seen as an alternative to washing. Not every entrepreneur provided detailed washing and disinfection instructions, and it seemed that it was often left to the customers to learn how to perform either properly. Washing and disinfection were mostly related to clothing, and these did not always include shoes, helmets, or other horses' or riders' equipment. Only three (14%) of entrepreneurs guided customers to wash their hands between different stables or after leaving a stable, two (9%) did not allow the transfer of horses' non-disinfected equipment between stables, and one (4.5%) reminded customers to disinfect their car's rubber mat after dirty shoes.

It was mostly Icelandic horse entrepreneurs who offered detailed washing and disinfection instructions, which included Virkon-S disinfection solution and 60°C heat in a washing machine or sauna. One Icelandic horse enterprise's website promised more information to customers on the phone after registration for riding activities. Traditional riding school customers were directed to either visit only one stable or avoid visits to any stables if there were recent outbreaks of contagious diseases. In one riding school, riders were informed to always wait one month before visiting this stable after a visit to another stable. In another riding school, these restrictions could be avoided by careful Virkon-S disinfection of the rider's equipment. In one stable populated by customers' leisure riding horses, disinfection of horse transport vehicles other than the stable's own was required and visitors were advised to avoid unnecessarily touching horses because of security and the possibility of spreading contagious diseases.

In closer customer relationships 14 horse entrepreneurs were met. They were those who emphasized preventive hygiene operations at their websites ($n = 22$). Based on their communication with a first author they can be divided into two types of horse entrepreneurs. Firstly, they responded to a core question of the customer and nothing more (79 %). Or, secondly, they responded to the question and started to direct the customer to their services by referring to their websites (21 %). However, none of the respondents referred hygiene instructions and had no diseases communication activity in a direct relationship with a customer, who had a risky customer profile.

The low level contagious disease communication activity by horse entrepreneurs renders it plausible that their activities to prevent contagious diseases were also generally relatively low. In these cases, horse entrepreneurs have no close contacts with special stakeholders, such as lawmakers and different authorities. They might still have close contact with their association members or private veterinarians. However, they can comply with the law without these close contacts because their own previous experiences with disease outbreaks and information from authorities. These different combinations of close or distant contacts and their influences on stakeholder relationships are illustrated in Table 1.

In two Icelandic horse and horse trekking enterprises, horse entrepreneurs convinced their customers of the up-to-date vaccination status of their horses, but despite the existence of these vaccinations, they wanted to follow general guidelines and good practices and offer arguments for good general hygiene and biosecurity to their customers. The reasons for changing and washing clothes were also presented in several riding schools. A times, it was a horse entrepreneur who asked the customers to report if they had visited a contaminated stable. Equine influenza, herpes virus, and strangles outbreaks were mentioned. In those co-creative circumstances, customers can participate in the maintenance of enterprise's biosecurity, and disease information flowed from the customer to the horse entrepreneur. In this specific case, the control activity of the principal-agent relationship was on the side of the agent and the agent (customer) acted as a prosumer (cf. Toffler, 2013).

Table 1. The robustness of transmission channels in the biosecurity of the horse industry

Stakeholder	Horse entrepreneurs	Customers
municipality	+	-
legislation	+/-	-
Hippos	+/-	-
EVIRA		

+ = veterinary and other authorities in the municipality have close contact with horse entrepreneurs

+/- = some horse entrepreneurs comply with the law better than others do (comply or not comply)

= some horse entrepreneurs comply with horse association's guides better than others do (comply or not comply)

_ = customers have no close personal contact with veterinary or other authorities

EVIRA = the Finnish Food Safety Authority, a central administration authority

DISCUSSION

This preliminary study among horse entrepreneurs reveals the importance of some theoretical connections. Classic perspectives, such stakeholder management or analysis and the principal-agent model, are still relevant in management discussions (Pepper, Gosling, & Gore, 2015; Clegg, Geppert, & Hollinshead, 2018), and there can be a need to study relationships between different traditional concepts in order to find new and perhaps more complete perspectives. A new concept over traditional industry concept (business ecosystem by Moore 1998) was included but by respecting the nature and history of Finnish horse economy. Moore suggests that the term "industry" should be replaced since nowadays no-one cannot divide economic activities under specific industries. However, term "industry" could be replaced by term "business ecosystem" only when involvement of other than equine-related sectors in Finnish context can be first shown. This study adopted a very specific perspective, that approach parallels the target of sustainable competitive advantage and ethics in business, which is not same as to create direct economic value for customers.

The perspective of prevention of contagious diseases differs also from the mainstream discussions of instrumental stakeholder management provided, for example, by Jones (1995) and Jones et al. (2018),

where the main aim is a sustainable competitive advantage. Thus, in this case, the perspectives of Hoffmann (2018), where potential CSR paradoxes are primarily disproven, are parallel with the conditions of this study. Usually, CSR studies are focused on work conditions, workplaces, and the general conditions of human beings (see, e.g., Mena & Suddaby, 2016; Helfen, Schüßler, & Sydow, 2018). In contrast, current study emphasizes (corporate social) responsibility in the context of animal well-being, although the actors are still human beings. Organizations have multiple stakeholders, such as employees, customers, clients, other organizations (e.g., suppliers), and even the public at large, who may value other measures of organizational performance (Morrow & McElroy, 2007), usually based on business efficiency, but biosecurity operations are the responsibility of the individual horse entrepreneur. According to previous reports (USDA, 2006; Rosanowski et al., 2012; Rosanowski et al., 2013), it is not sure if these responsibilities are fully implemented.

Horse entrepreneurs have the opportunity to manage one of their stakeholder groups, which can be achieved through their website communication. In the framework for effective stakeholder management (Yang et al., 2011), and in a study from banking industry (Carrasco et al., 2019) communication with stakeholders has been emphasized. Authors know that in general, horse owners vaccinate their horses (Koskinen, 2014a) but vaccination decisions are not done according customers' preferences. Prevention of contagious diseases, such as by washing hands, clothes and shoes before the arrival to the stable area, should be seen as a clear goal and a security issue in customer relations. From the horse entrepreneur's perspective, biosecurity and communication about biosecurity can be more important than a detailed analysis of stakeholders and their needs, so this case may challenge the traditional perspective of stakeholder identification and analysis.

In the prevention of contagious diseases, the chain of communication and instructions provides a principal-agent chain not only between public stakeholders, such as regulators and veterinary and environmental authorities at various administrative levels, but also between horse entrepreneurs and customers. This is the first investigation which can show that horse entrepreneurs have a double role as an agent and a principal. From this perspective it remains crucial to identify and analyze stakeholders' behaviors in order to investigate how well the instructions are followed. This is a critical success factor in a process of biosecurity management. Horse entrepreneurs should know whether their customers take their instructions seriously. This monitoring is a moral ("should do") dimension of stakeholder theory (Jones, 1995) and an opportunity to construct a co-creative process of stakeholder management. Based on empirical findings, it appears likely that horse entrepreneurs do not fully understand the idea of co-creation of biosecurity. Thus, the typical problems of principal-agent model, such as the agent's incentives and the level of effort (Barron & Gjerde, 1997), are present in this study. Assessing stakeholder relationships requires measuring the behaviors and attitudes of both the firm and particular stakeholders (Jones et al., 2018). In the future, customers' real actions and the visible actions of horse entrepreneurs when interacting with their customers should be monitored.

Horse entrepreneurs receive multiple instructions from the Finnish Trotting and Breeding Association, Finnish Equestrian Association, and even breeders' associations. Through the lens of stakeholder relationship management and information flow between stakeholders, it can be expected that disease communication activity by Icelandic horse enterprises depends on the Finnish Icelandic Horse Association's active role in the communication about contagious diseases to their member stables. As a further study, the quality of this communication and these instructions should be investigated. It would also be important to know how much these associations influence the behavior of horse entrepreneurs and to identify the agents and the principals in these tripartite association-horse entrepreneur-customer relationships.

In this study design, the power of social media was trusted. This is a limiting factor of current study. This choice restricts the investigation and therefore the generalizability of the findings to those horse enterprises that have websites and active Facebook groups. Control and prevention of infection are suitable exercises for co-creation activities between stakeholders (Van Woezik et al., 2016) and between horse entrepreneurs and their customers in web-based communication channels, but a co-creative power is not fully realized until a real outbreak situation. In such a situation, there will likely be verbal instructions

and more detailed written instructions presented in the physical environment of the infected stable. From the perspective of effective biosecurity practices, these stakeholder communication techniques should then be strongly emphasized. It has been found that firms and their stakeholders have different information interests in social media (Carrasco et al., 2019) and therefore, in the case of disease outbreak it is a big question if it is worthwhile to post strict instructions online.

CONCLUSIONS

In this research on stakeholder management and information flows, qualitative data from the disease prevention activity of horse entrepreneurs was collected. It can be concluded that it is uncommon for horse entrepreneurs to communicate the threat of contagious diseases to their customers. This shows weaknesses in the chain of principal-agent relationships, which are part of the analyzed normative instrumental stakeholder management in this branch of the equine industry.

However, this lack of communication may be due to Finland's good animal health situation and the lack of many serious equine diseases or, by contrast, to the non-business nature of many Finnish horse enterprises. Customers' traffic from one stable to another was recognized by some horse entrepreneurs, particularly in Icelandic horse and horse trekking enterprises, and instructions were offered for these situations. Nevertheless, biosecurity plans were not visualized, restrictions after international journeys were not introduced, and customers' hand hygiene was often neglected. The biosecurity operations generally implemented in Finnish farms populated by cows, pigs, and poultry were not seen to contribute economic value to a successful horse enterprise.

This perspective, which combines the principal-agent perspective and stakeholder analysis, is unique. Analysis reveals the general importance of seeking sensible connections between traditional theories about networking and/or multi-level relationships. Furthermore, these two perspectives have connections with CSR both in general and in the specific case of the prevention of diseases in the horse industry. Analysis also reveals the importance of industry-level case studies: specific cases might show new connections between different paradigms, models, perspectives, and discussions.

The biosecurity weakness in a principal-agent relationship between a horse entrepreneur and a customer was identified, perhaps due to a complex and distant principal-agent chain between the entrepreneur and those authorities responsible for communicating about infectious diseases and preventive operations. Horse entrepreneurs should act as an agent in these relationships and follow their principal's instructions. The communication chain can break even before reaching the entrepreneur-customer level, where entrepreneurs act as principals and customers as agents, and therefore it is not able to guarantee biosecurity co-creation opportunities to customers. What is important is a horse entrepreneur's simultaneous roles as an agent and a principal. The value of stakeholder management is visible if both roles can be recognized and carefully balanced.

This study provides themes for further research. The reasons for the lack of information on contagious disease prevention in horse entrepreneurs' web pages and other platforms require further study. Furthermore, the stakeholder management studies emphasize the simple principal-agent relationship, but they have not taken into account the longer chain of principal-agent relationships and their linkages with (instrumental) stakeholder management, which also calls for future research.

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KEY TERMS AND DEFINITIONS

Biosecurity weakness: Identified in a principal-agent relationship between a horse entrepreneur and a customer, perhaps due to a complex and distant principal-agent chain between the entrepreneur and those authorities responsible for communicating about infectious diseases and preventive operations.

Communication chain: Covers horse business with full- or part-time horse-related enterprises.

Double role: In the context of this chapter, the horse entrepreneurs have a double role as an agent and a principal.

Equine industry: Covers horse business with full- or part-time horse-related enterprises and workers.

Instrumental stakeholder theory: Integrates stakeholders of business and society, and is the synthesis of ethics and economics.

Principal-agent relationship: An arrangement in which one entity, e.g. legally, appoints another to act on its behalf.

Principal - agent/principal -agent relationship: The chain of principal-agent relationship, where one (or more) actor has simultaneously both the role of principal and the agent.